

**National Park Service  
U.S. Department of the Interior**



**Grand Canyon National Park  
Arizona**

**Memo to Files**

To: File GRCA-01-0023  
From: Mary Killeen, Office of Planning and Compliance  
Subject: Interim Measures for Colorado River Trip Take-outs Prior to the Completion of the Planned Expansion of the Pearce Ferry Access Road

**Background**

The Colorado River flows 277 miles through Grand Canyon National Park (GRCA), from Lee's Ferry (River Mile 0) to the boundary between GRCA and Lake Mead National Recreation Area (LAME) (River Mile 277). The only road access to the river between Lee's Ferry and LAME is at Diamond Creek on the Hualapai Indian Reservation (River Mile 226); access to the river at all other points in GRCA is only by foot, pack animal, or helicopter.

The National Park Service (NPS) manages public use of the Colorado River in GRCA through the 2006 Colorado River Management Plan (CRMP).<sup>1</sup> In accordance with the CRMP and the NPS Concessions Management Improvement Act of 1998, 16 U.S.C. §§ 5951-5966 (2006), the NPS currently authorizes 16 outfitters to provide commercial boat trips on the river. All of those trips put onto the river at Lee's Ferry. Under their existing authorizations some of the outfitters end their whitewater trips at Separation Canyon (River Mile 240), where they transfer their passengers to jet boats for transport down the lower reach of the river and across Lake Mead to take-out points in LAME. The jet-boat service was initiated in order to mitigate safety concerns associated with transporting passengers through these slow-moving waters, an exposed portion of the trip where normal summer temperatures range between 105 and 115 degrees Fahrenheit. Using the jet-boat service, passengers exit the water in approximately two hours, compared to the five or six hours that would be required for a slower motorized boat or an entire day for an oar-powered trip.

Historic low-water levels now have rendered the traditional take-out point in LAME at Pearce Ferry (approximately River Mile 280) inaccessible and unusable. The currently accessible take-out point is at South Cove, (approximately River Mile 296), sixteen miles beyond Pearce Ferry. As the waters of LAME continue to recede, a new rapid has formed at Pearce Ferry, which during the spring of 2009 became impassible to the jet boats. This prevents their use on the 40-mile stretch of river between Separation Canyon and the rapid.

Since the formation of the new Pearce Ferry rapid the NPS has planned to extend the existing Pearce Ferry access road by approximately two miles to provide jet-boat access and river take-outs above the rapid. LAME has completed environmental compliance and permitting for the project and has secured funding. The project's planned completion date is late summer 2009.<sup>2</sup>

<sup>1</sup> The notice of availability for the Record of Decision for the CRMP was published in the Federal Register on March 23, 2006, 71 Fed. Reg. 14,717.

<sup>2</sup> The Pearce Ferry access road extension was considered in a 2006 Environmental Assessment for an amendment to LAME's 1983 General Management Plan. The amendment was developed primarily to address low-water and drought conditions, however, at that time the action was not considered a priority, because river trips were able to use jet-boat service to transport passengers farther down-lake to South Cove. Following the development of the Pearce Ferry rapid, LAME completed a Memo to File addressing the construction of an extension to the access road.

Until the new access road is completed, several commercial river outfitters who normally rely on jet-boat operations have requested temporary operational changes under the CRMP. Three to five river outfitters who run full-river trips from Lee's Ferry to South Cove have requested, or soon may request, permission to end trips at Diamond Creek. To exit the river early at Diamond Creek while retaining the original booked trip length, the outfitters have requested permission to stay one additional night per trip above Diamond Creek. The CRMP limits the number of trips at one time (TAOTs) and people at one time (PAOTs) that can use the Colorado River between Lee's Ferry and Diamond Creek.

In addition, one to four river outfitters have requested, or soon may request, permission to end Colorado River trips in the Quartermaster Canyon area (River Mile 260). The passengers would disembark there and board helicopters on nearby Hualapai tribal lands for transport out of the canyon. These trips are primarily shorter one- to two-day trips that passengers join at Whitmore Wash (River Mile 188), that usually end their whitewater portion and transfer to jetboats at Separation Canyon (River Mile 240), and that take out at South Cove in LAME (River Mile 296). Because of the short duration of these trips, a take-out at Diamond Creek is not a viable option. There are no other river access points between Diamond Creek and South Cove.

The Quartermaster Canyon area is currently the terminus for day-long Colorado River rafting trips that originate at Diamond Creek and the access point for short pontoon-boat trips, both of which are conducted by or for the Hualapai Tribe. Passengers on trips conducted by or for the Hualapai Tribe are currently transported in and out of the canyon in the Quartermaster Canyon area on helicopters via operations conducted entirely on Hualapai Tribal lands.<sup>3</sup>

The Hualapai Tribe's river-running and pontoon-boat operations, including the soundscape implications of the associated helicopter operations, were analyzed in the Final Environmental Impact Statement (FEIS) for the CRMP; however, because the helicopter operations are conducted entirely on Hualapai Tribal lands, helicopter flights within the Quartermaster Canyon area are not regulated by the NPS. The CRMP limits river trips dropping off and picking up passengers in the Quartermaster Canyon area to those trips conducted by or for the Hualapai Tribe.

The FEIS for the CRMP sets the initial maximum number of rafting and pontoon-boat passengers joining and leaving Hualapai-operated river trips in the Quartermaster Canyon area at 576 with an associated 694 minutes of audible helicopter noise per day.<sup>4</sup>

The FEIS for the CRMP analyzed the noise from the helicopter shuttles used to ferry river trip passengers in and out of river trips as direct effects on the natural soundscape. The FEIS also considered as direct effects on the natural soundscape the sounds produced by motorized rafts, river human activities (such as camp noise and voices), pontoon boats, and high-powered jet boats and found that all audible sound associated with river operations in the Quartermaster Canyon area would range from a low of 2,412 minutes to a high of 3,042 minutes. *See, e.g.,* FEIS at 399-400. Because there are only 720 minutes in a 12-hour operating day, some of that noise must occur at the same time or "overlap."

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<sup>3</sup> The Hualapai Tribe and the NPS share a boundary along the southern bank of the Colorado River from River Mile 164.8 to River Mile 273.1. In the CRMP the NPS expressed its intent to issue the Hualapai Tribe a concession contract or other permit for its river running operations; however, an agreement is not yet in place. The NPS is currently pursuing negotiations on an agreement with the Hualapai Tribe.

<sup>4</sup> The initial maximum number of river passengers analyzed in Modified Alternative 4 included 480 pontoon boat passengers and 96 rafting day trip passengers for a total of 576 passengers entering and exiting via helicopter in the Quartermaster Canyon area per day. Minutes of associated helicopter noise for each of these passengers were calculated by using an average of five passengers per helicopter, three minutes per flight, and two flights per trip (in and out), for a total initial maximum of 694 minutes of helicopter noise per day.

Modified Alternative 4 also allowed for some growth in operations, based on favorable performance reviews and resource monitoring data, up to 600 pontoon boat passengers, 96 day-trip-rafting passengers, and 60 overnight-rafting passengers per day, for a total of 756 passengers entering or exiting the canyon via helicopter in the Quartermaster Canyon area per day and an associated 912 minutes of helicopter noise per day. *See, e.g.,* FEIS at 399-400.

In addition to the helicopter activity associated with its river trips, the Hualapai Tribe conducts a large number of "look and leave" helicopter tours on Hualapai Tribal lands in the Quartermaster Canyon area. These tours consist of (1) short sightseeing flights during which helicopters do not land and passengers do not disembark and (2) short flights to the banks of the Colorado River, where helicopters land and passengers disembark for a short period of time but do not participate in any type of river running or pontoon-boat activity. Because these "look and leave" helicopter activities are conducted entirely on Hualapai Tribal lands, they are not regulated by the NPS. The FEIS for the CRMP did, however, consider the implications of these additional flights in the Quartermaster Canyon area as part of the cumulative effects of the various alternatives on the natural soundscape.

The FEIS analysis for the CRMP concluded that the Quartermaster Canyon area is essentially saturated with noise with very few noise-free intervals on a busy day. *See, e.g.,* FEIS at 400-401.

### **Temporary Operational Options**

#### *Longer trips between Lee's Ferry and Diamond Creek*

The CRMP expressly contemplates that the NPS may use "adaptive management" to address changing resource conditions. *See, e.g.,* FEIS at 38-39 and ROD at 7. On a temporary basis the NPS will authorize three to five outfitters to end their trips at Diamond Creek and to spend one additional night above Diamond Creek to maintain their original trip length as long as the outfitters can do so without exceeding the number of user days, TAOTs, or PAOTs set forth in the CRMP for that reach of the river. This temporary authorization therefore does not require an amendment to the CRMP.<sup>5</sup>

In order to maintain original trip lengths, some outfitters who are not authorized to stay an additional night above Diamond Creek may choose to speed their trips and continue as planned to the take-out at South Cove without the use of jet boats above Pearce Ferry rapid. As temperatures rise in June and July, however, these companies will likely request permission to end trips in the Quartermaster Canyon area to avoid prolonged exposure to extreme heat. The implications of the helicopter operations related to ending trips in the Quartermaster Canyon area are discussed below.

#### *Helicopter operations in the Quartermaster Canyon area*

On a temporary emergency basis, and considering the visitor safety issues associated with the extreme heat below Separation Canyon, beginning in June, GRCA will allow outfitters to end trips in the Quartermaster Canyon area where passengers will use helicopters to exit the canyon.

Observations by NPS staff during river patrol trips over the last two years have indicated that Hualapai Tribal operations in the Quartermaster Canyon area have not exceeded the initial maximum of 576 raft and pontoon boat passengers per day as analyzed in Modified Alternative 4 in the FEIS for the CRMP. The NPS reasonably believes that temporarily allowing additional commercial river outfitters to disembark passengers via helicopters in the Quartermaster Canyon area would not exceed the passenger and helicopter noise limits analyzed in Modified Alternative 4.

Allowing this change in operation will result in a maximum of 1,232 passengers disembarking in June from river trips not associated with the Hualapai Tribe and a maximum of 1,800 additional passengers disembarking in July from river trips not associated with the Hualapai Tribe.<sup>6</sup>

<sup>5</sup> The CRMP also limits trip length above Diamond Creek. *See, e.g.,* FEIS at 61 and Record of Decision at 2. The NPS's temporary authorization here may result in a few trips exceeding their maximum trip length by one day. The impact analysis in the FEIS, however, was based on TAOTs and PAOTs, which will not be exceeded in any circumstances.

<sup>6</sup> These numbers represent the maximum number of passengers, not including Hualapai river trip passengers, that could potentially exit the canyon via helicopter in the Quartermaster Canyon area and include the two night trips that normally run between Whitmore Wash and Separation Canyon and the entire-river trips that normally run between Lee's Ferry and Separation Canyon that are not authorized to stay an additional night above Diamond Creek. Some of the full-river trips may choose to speed their trips and continue on to South Cove without the use of jet boats above the Pearce Ferry Rapid, or to end trips at Diamond Creek. The NPS assumes, however, that, during June and July, as temperatures rise, many of the full-river trips will request permission to end trips in the Quartermaster Canyon area.

During this time the number of passengers in the Quartermaster Canyon area who are not associated with Hualapai operated trips will range from 28 to 112 per day, and the associated helicopter noise will range from 36 to 138 minutes per day. Based on observable data associated with Hualapai Tribal operations, GRCA staff does not believe that these temporary changes in minutes of audible helicopter noise and additional passengers will exceed the ranges established for Quartermaster Canyon operations in Modified Alternative 4.

River-trip passengers disembarking in the Quartermaster Canyon area will be dropped off at one of two docks operated by the Hualapai Tribe. They then will walk approximately 200 yards to one of the helicopter landing areas associated with each dock, located above the high water mark on Hualapai Tribal lands. When passengers arrive at the docks, employees working for the Hualapai Tribe normally are present in the area to help passengers disembark from the boats, to notify helicopter operators of the passengers' arrival, and to help passengers board the helicopters. Helicopter activity associated with river operations in the Quartermaster area is at the highest level during the early to mid-afternoon when the day-long Hualapai operated river rafting trips are ending. In order to minimize impacts, the NPS will require river outfitters to disembark passengers during this time period.

Any changes in river outfitter operations in the Quartermaster Canyon area will be on a temporary basis and will cease immediately following the completion of the Pearce Ferry access road extension or the end of the 2009 river season, whichever occurs first. During the 2009 season, NPS will monitor the Quartermaster Canyon area, particularly on days with a high number of potential passenger disembarkations, in order to ensure that passenger levels set in the CRMP are not exceeded. If, during the season, the NPS believes that passenger levels in the Quartermaster Canyon area exceeding the daily limits set in the CRMP, the NPS will require river outfitters to take operational measures to reduce the number of passengers disembarking in the area. Finally, because all helicopter operations in the Quartermaster Canyon area occur on Hualapai Tribal lands, any potential changes will be contingent upon the river outfitters reaching an agreement for the operations with the Hualapai Tribe.

*National Environmental Policy Act (NEPA) Requirements for Temporary Operational Changes in the Quartermaster Canyon Area*

The NPS plans to temporarily allow river companies, in addition to the Hualapai Tribe, to end trips in the Quartermaster Canyon area, but will not allow passenger levels to exceed those set forth in the CRMP. The proposed action, allowing passengers to disembark river trips in the Quartermaster Canyon area, and the associated impacts, have already been analyzed in site specific detail in the FEIS for the CRMP.

Allowing additional entities to disembark passengers in the Quartermaster Canyon area will not create impacts to the natural soundscape greater than those analyzed in the FEIS for the CRMP. Direct effects from helicopter shuttles will not exceed those analyzed in the CRMP, because passenger limits will not be higher than those analyzed in the CRMP. In addition, because high-powered jet boats will not be used to ferry passengers between Separation Canyon and the Pearce Ferry rapid at Lake Mead there will be some reduction in boat noise in the area. Furthermore, because the NPS plans to allow the additional outfitters to end trips during the busiest periods of the day and because the Quartermaster Canyon is essentially saturated by sound during those times, much of the sound from the associated boat and helicopter operations will "overlap" with pre-existing sound in the area. Finally, because passenger limits will not be higher than those analyzed in the CRMP, no additional impacts to other resources analyzed in the FEIS for the CRMP are expected.

The Council on Environmental Quality regulations implementing NEPA address the need to supplement an environmental impact statement in 40 C.F.R. § 1502.9. That section of the regulations reads in pertinent part as follows:

(c) Agencies:

(1) Shall prepare supplements to either draft or final environmental impact statements if:

(i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or

(ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

Here, because the NPS plans to stay within the use limits set in the FEIS for the CRMP, the NPS is not making a substantial change to the proposed action. In addition there are no significant new circumstances or information. For those reasons, GRCA staff have determined that a supplemental environmental impact statement is not necessary and that a Memo To File addressing the temporary operational changes in the Quartermaster Canyon area is sufficient to comply with NEPA, particularly given that the NPS plans to require the river outfitters to reduce passenger disembarkations in the area if monitoring indicates that passenger levels are exceeding those set forth in the FEIS for the CRMP and that this action is temporary and will be resolved by the conclusion of the 2009 operating season.

*Recommended by:*

  
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Mary Killeen, Chief, Office of Planning and Compliance

5.13.09

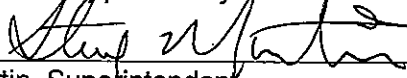
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5.18.09

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